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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/587,310

07/26/2006

Takashi Kawabata

06477/LH

4527

1933 7590 09/15/2009  
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EXAMINER

PEFFLEY, MICHAEL F

ART UNIT

PAPER NUMBER

3739

MAIL DATE

DELIVERY MODE

09/15/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/587,310	<b>Applicant(s)</b> KAWABATA ET AL.	
	<b>Examiner</b> Michael Peffley	<b>Art Unit</b> 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 12, 2009 has been entered.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9, 10, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Messing (2003/0004506).

Messing discloses an RF ablation catheter comprising a tip electrode (500 - Figure 5) including a unit which detects temperature (shown in Figure 5 without a label, but labeled as element 430 in Figure 4A) and a catheter shaft attached to the electrode (shown in Figure 1). The electrode is formed as a single metallic body and has a surface comprising three spherical or approximately spherical surfaces that have centers on the same straight line (Figure 5). A reduced diameter portion (520) is provided between each of the adjacent spherical surfaces such that the spherical surfaces are connected by a curved surface. Messing disclose the use of various

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materials for making the electrode, including the use of platinum, platinum-iridium alloys and gold (Para. 0042).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Messing ('506).

The Messing electrode has been addressed above. Messing fails to disclose the specific lengths and relative diameters for the electrode features. It is noted, however, that Messing teach that the reduced diameter portions provided between the electrodes serves to provide an electrode capable of creating a larger tissue lesion as disclosed by applicant. See paragraph [0052] for discussion of the use of different diameter portions along the length of the electrode. The examiner maintains that one of ordinary skill in the art would obviously be capable, without undue experimentation, or arriving at desired lengths and diameters for the electrode depending on the particular procedure and the desired result. Applicant's specification fails to disclose any criticality or unexpected results associated with the particular parameters, and the examiner maintains that the skilled artisan would obviously be capable of optimizing the parameters to achieve a desired result.

To have provided the Messing electrode with any desired length and/or spacing for the spherical shaped elements would have been an obvious design consideration for one of ordinary skill in the art, particularly since the skilled artisan would recognize the obvious effects of modifying these parameters and the modification's impact on tissue treatments.

### ***Response to Arguments***

Applicant's arguments filed May 27, 2009 have been fully considered but they are not persuasive.

Applicant asserts that the Messing device fails to disclose spherical surfaces that are connected by a curved surface and are unbroken. In support of this position, applicant makes reference to Figure 5 of the Messing device, and specifically to the exit ports (520) which appear to separate the spherical electrodes. While the examiner agrees that there are ports (520) between the electrodes, the electrodes are still necessarily connected by a curved surface that is unbroken. Figure 5 is a cross section of the electrode device which shows the ports between the electrodes. A side view of the device would show an unbroken curved surface connecting the electrode elements. It is impossible for the three electrodes to be entirely separated, as seemingly shown in Figure 5. It is necessary for a portion of the curved surface to extend in an unbroken manner between each electrode, with ports located at selected positions along the surface. The examiner maintains that there is nothing in the amended claim language that precludes the presence of a port. Rather, the claims only require an unbroken curved surface between the electrodes. The claim does not require there to be no gaps

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or apertures anywhere on the surface, only that there is an unbroken surface connecting the electrodes. The examiner maintains that there are necessarily unbroken curved surfaces so the device may be a unitary structure that may be provided to tissue.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Peffley whose telephone number is (571) 272-4770. The examiner can normally be reached on Mon-Fri from 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Peffley/  
Primary Examiner, Art Unit 3739

/mp/  
September 12, 2009